

**Covid19 Pandemic: Rural Dwellers Attitude towards Eradication in Nigeria**

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**Abstract:** The world is facing a novel corona virus called covid19 which was first detected in Wuhan in China which has claimed millions of lives Nigeria not exception. In Nigeria the virus has resulted into government having some guidelines for people to observe in order for the virus not to continue spreading. The work is therefore aim at investigating the attitude of rural dwellers in the south western Nigeria towards the guidelines set up by the Government agent towards the eradication of covid19. Method adopted for the collection of data for the study was Interview method. Interview method according to Dale, 2018 is a popular way of gathering qualitative research data as it is perceived as talking and this is natural. The interview does not require statistical knowledge and the respondents are always willing to respond as it give them confidence. The data collected were analyzed using frequency count, and percentage. The study covers rural dwellers in south western state of Nigeria and total of two hundred and Ten (210) respondents were randomly selected for be interviewed by the researchers and research assistants. Standardized questions were set for all the respondents. Thus any answer will be caused by differences among the respondents. Findings from the research reveals that the respondents are aware of the existence of the virus, however social distancing may not work in local rural areas due to their culture and the nature of the accommodation. It is the believe of most of the respondents that the virus is for elites in the society and also that Government exaggerates the number of affected people for political and financial gain among others. It is therefore recommended among others, that Government should find alternative for social distance in rural community or provide accommodation to reduce numbers of people in a room as well as intensify awareness among the rural dwellers the effect of the virus and that it doesn't know class or gender. Government should always be transparent in order to make residents have faith in the government.

**Keywords;** Coronavirus, Covid19, Rural Dwellers

## Introduction

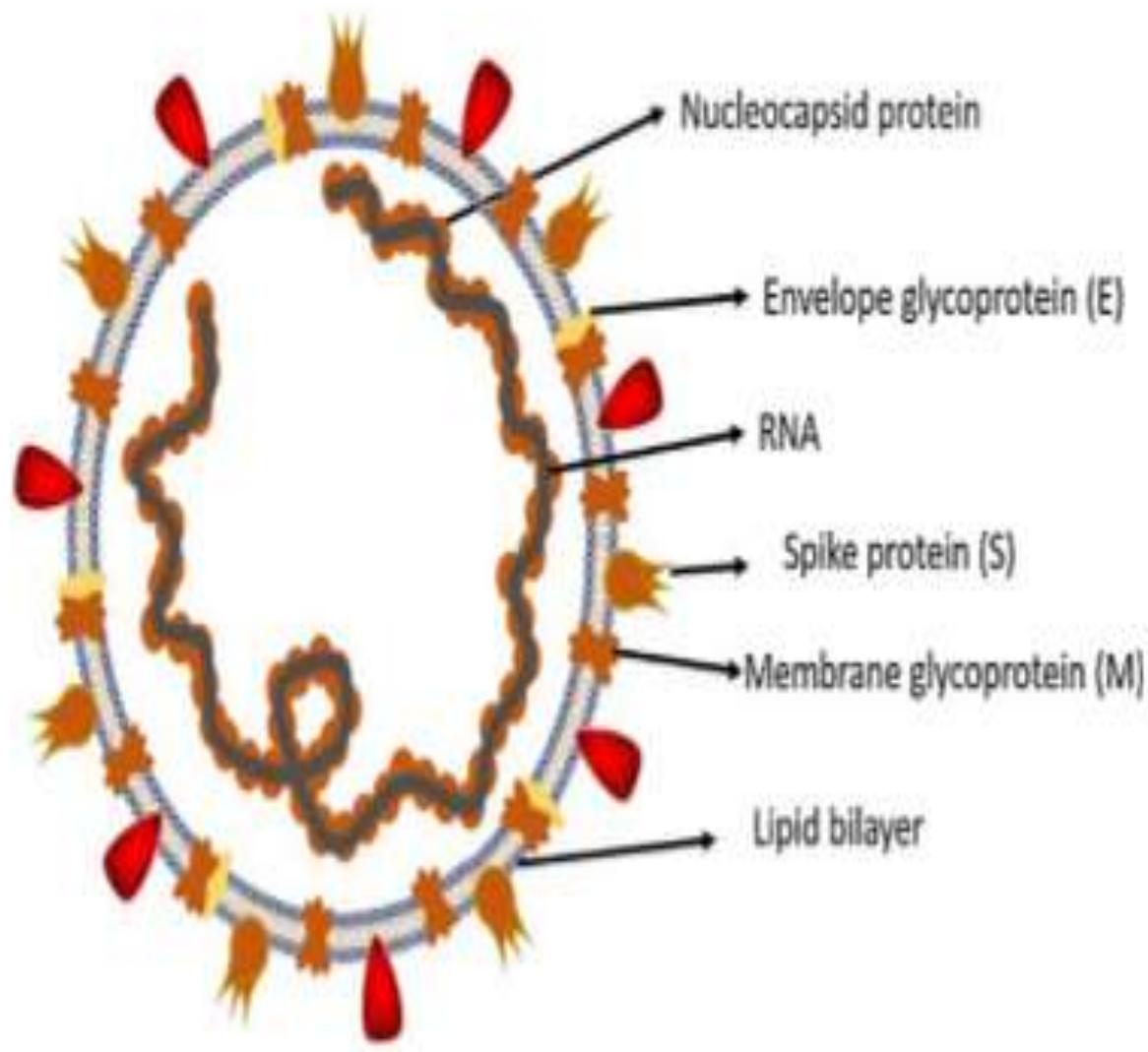
Coronavirus is a virus belonging to the family coronaviridae and order nidovirales. It causes the coronavirus disease 19 (COVID-19) which is cosmopolitan (i.e. world-wide). It was first described in 2019 in Wuhan, the capital of China's Hubei province after there were series of pneumonia cases infecting more than 7000 individuals and killing more than 1800 individuals within the first fifty days of epidemic (CDC, 2020). In January 7, 2020, the virus that was said not to match any other virus was named and identified and temporarily named "2019-nCov." As at the 28<sup>th</sup> of February, 2020, it was said to have a high risk assessment worldwide resulting in the ongoing COVID-19 pandemic reporting more than 2.4 million cases as of April 20, 2020 across 185 countries (Worldometer, 2020) causing more than 165,000 deaths with more than 165,000 recovered cases (Johns Hopkins, 2020). This new strain of virus has been officially referred to and named as the novel coronavirus (2019-nCov-2) by the International Committee on Taxonomy of Viruses (ICTV) (Cui J, Li, F, Shi Z-L, 2019).

(2019-nCov-2)is a beta ( $\beta$ ) coronavirus, like Middle East Respiratory syndrome (MERs), severe acute respiratory syndrome (SARs), all of which have their origin in bats. The genome of the virus has been sequenced by the Chinese for identification and effective detection. The same genome that was identified by the Chinese was identified in two (2) cases recorded first in the U.S. The virus has been said to infect a wide number of host species which includes man and other vertebrates causing respiratory and intestinal tract infections and induce a wide range of clinical manifestations (Heugelet *et al.*, 2007). Thus, several human coronaviruses (HCoVs) are the etiological agents for mild respiratory illness, including the common cold (e.g., HCoV-229E, HCoVOC43, HCoV-NL63 and HCoV-HKU) (Heugelet *et al.*, 2007). Coronaviruses that induce respiratory tract infection in other vertebrate animals consist of mouse hepatitis virus-1 (MHV-1) a natural mouse pathogen, infectious bronchitis virus (IBV) in chickens and other avian species, bovine coronavirus (BCoV) in cows and other ruminants, porcine respiratory syndrome virus (PRCV) in pigs and canine respiratory coronavirus (CRCoV) in dogs amongst others (Perlman &Dandekar, 2005). Coronaviruses that induce mild respiratory illness are generally more prevalent in younger populations of humans and domestic animals (Perlman &Dandekar, 2005), while those that are responsible for severe disease, such as SARS-CoV and

MERS-CoV, cause lethal disease in aged or immune-compromised individuals (e.g. HIV/AIDS patients) (Zaki, 2012)

#### Structure of Coronavirus

Coronavirus are large, enveloped, and positive-stranded RNA viruses, typically ranging from 27 to 32kb. The genome is packed inside a helical capsid formed by the nucleo-capsid protein (N) and further surrounded by an envelope. Associated with the viral envelope are at least three structural proteins: The membrane protein (M) and the envelope protein (E) are involved in virus assembly, whereas the spike protein (S) mediates virus entry into host cells. Some coronaviruses also encode an envelope-associated hemagglutinin-esterase protein (HE). Among these structural proteins, the spike forms large protrusions from the virus surface, giving coronaviruses the appearance of having crowns (hence their name; corona in Latin means crown). In addition to mediating virus entry, the spike is a critical determinant of viral host range and tissue tropism and a major inducer of host immune responses. The coronavirus spike contains three segments: a large ectodomain, a single-pass trans-membrane anchor, and a short intracellular tail.



**Fig 1: Structure of Coronavirus**

### **Transmission of COVID-19**

COVID-19 is a novel disease whose mode of transmission is still learnt with a vague picture. According to Center for Disease control, the following are the known mode of transmission:

- **Contact (direct and indirect)**

The virus is thought to spread mainly from person-to-person. Between people who are in close contact with one another (within about 6 feet) or through respiratory droplets produced when an infected person coughs, sneezes and talks.

Direct transmission occurs when a person is in close contact (within 1m) with someone who has respiratory symptoms (e.g. coughing or sneezing) and is therefore at risk of having his/her mucosae (mouth and nose) or eyes exposed to potentially infective respiratory droplets or indirectly, through fomites in the immediate environment around an infected person (Ong *et al.*, 2019) or with objects used on infected persons (e.g. stethoscope)

- **Air Borne Transmission**

The presence of microbes within droplets nuclei, which are generally considered to be particles  $<5\mu\text{m}$  in diameter, which can remain in the air over a long period of time and be transmitted over a distance more than 1m

- **Zoonotic Transmission**

The disease is said to be zoonotic (from animals to humans) because of the origin of the disease in Wuhan was linked to a large seafood and live market suggesting the spread from animals to persons. The outbreak in China had some link to

- **Feacal-Oral Transmission**

There are some evidences that COVID-19 infection may cause intestinal infection and can be present in feces. However, to date only one study has cultured the COVID-19 virus from a single stool specimen (Zanget *et al.*, 2019). There have been no reports of feacal-oral transmission of COVID-19 to date.

### **The Signs, Symptoms, Disease Progression and Severity (According to WHO)**

#### **Symptoms of COVID-19**

Symptoms of COVID-19 are non-specific and the disease presentation can range from no symptoms (asymptomatic) to severe pneumonia and death. As of 20 February 2020, based on 55, 924 laboratory confirmed cases, typical signs and symptoms include: fever (87.9%), dry cough (67.7%), fatigue (38.1%), sputum production (33.4%), shortness of breath (18.6%), sore throat (13.9%), headache (13.6%), myalgia or arthralgia (14.8%), chills (11.4%), nausea or vomiting (5.0%), nasal congestion (4.8%), diarrhea (3.7%), and hemoptysis (0.9%), and conjunctiva congestion (0.8%).

People with COVID-19 generally develop signs and symptoms, including mild respiratory symptoms and fever, on an average of 5-6 days after infection (mean incubation period 5-6 days, range 1-14 days). Most people infected with COVID-19 virus have mild disease and recover. Approximately 80% of laboratory confirmed patients have had mild to moderate disease, which includes non-pneumonia and pneumonia cases, 13.8% have severe disease (dyspnea, respiratory frequency  $\geq 30/\text{minute}$ , blood oxygen saturation  $\leq 93\%$ , PaO<sub>2</sub>/FiO<sub>2</sub> ratio  $<300$ , and/or lung infiltrates  $>50\%$  of the lung field within 24-48 hours) and 6.1% are critical (respiratory failure, septic shock, and/or multiple organ dysfunction/failure). Asymptomatic infection has been reported, but the majority of the relatively rare cases who are asymptomatic on the date of identification/report went on to develop disease. The proportion of truly asymptomatic infections is unclear but appears to be relatively rare and does not appear to be a major driver of transmission

#### **Population at risk of COVID-19**

Individuals at highest risk for severe disease and death include people above the age of 60 years as well as immune-compromised patients (such as patients with hypertension, diabetes, cardiovascular disease, chronic respiratory disease and cancer). Disease in children appears to be relatively rare and mild with approximately 2.4% of the total reported cases reported amongst individuals aged under 19 years. A very small proportion of those aged under 19 years have developed severe (2.5%) or critical disease (0.2%).

Mortality increases with age, with the highest mortality among people over 80 years of age ((crude fatality ratio (CFR) 21.9%). The CFR is higher among males compared to females (4.7% vs. 2.8%). By occupation, patients who reported being retirees had the highest CFR at 8.9%. While patients who reported no comorbid conditions had a CFR of 1.4%, patients with comorbid conditions had much higher rates: 13.2% for those with cardiovascular disease, 9.2% for diabetes, 8.4% for hypertension, 8.0% for chronic respiratory disease, and 7.6% for cancer.

## **Prevention and Cure**

### Isolation and Quarantine

Isolation refers to the separation and restricted movement of ill persons who have a contagious disease in order to prevent its transmission to others. It typically occurs in a hospital setting, but can be done at home or in a special facility. Usually individuals are isolated, but the practice may be applied in larger groups. Quarantine refers to the restriction of movement or separation of well persons who have been exposed to a contagious disease, before it is known whether they will become ill. Quarantine usually takes place in the home and may be applied at the individual level or to a group or community of exposed persons. It can also be the separation of well persons who have been exposed to a contagious disease, before it is known whether they will become ill. Quarantine usually takes place in the home and may be applied at the individual level or to a group or community of exposed persons.

The main goal of modern quarantine is to reduce transmission by increasing the “social distance” between persons; that is, reducing the number of people with whom each person comes into contact. If quarantine is to be used, the basic needs of those infected and exposed must be met. The following key principles of modern quarantine ensure that it strikes the appropriate balance between individual liberties and the public good:

- Quarantine is used when persons are exposed to a disease that is highly dangerous and contagious.
- Exposed well persons are separated from those who are ill.
- Care and essential services are provided to all people under quarantine.
- The “due process” rights of those restricted to quarantine are protected.

### Contact surveillance

Contact surveillance, in the context of quarantine, is the process of monitoring persons who have been exposed to a contagious disease for signs and symptoms of that disease. Surveillance may be done passively, for example, by informing contacts to seek medical attention if signs or symptoms occur. Contact surveillance can also be performed actively, for example, by having health workers telephone contacts daily to inquire about signs and symptoms or even having health workers directly assess contacts for fever or other symptoms. All quarantined persons should be monitored for development of signs and symptoms of disease to ensure appropriate isolation, management, and/or treatment. For persons without a known contact but believed to be at increased risk for disease or exposure, enhanced surveillance and education can be used for risk assessment monitoring.

There has been different opinion about the existence and level of the prevalence of the virus among the people of Nigeria especially rural dwellers. To some people, though the virus is real, however, the prevalence is being exaggerated by government to get cheap popularity or to steal public money. Some people are of the opinion that the prevalence is under reporting to hide the government inefficiency. The study therefore triesto investigate opinion of rural dwellers in South WestNigeria towards covid19pandemic and possible obedience towards observation of health workers towards eradicating the pandemic.

In the midst of this environmental problem an intervention through environmental education (EE) is urgently needed. Such intervention must be holistic and practical in manner akin to the mass literacy campaigns, universal basic education (UBE), free education at all levels, nomadic education, population education, Better Life for Rural Women, Mass Mobilization for Social and Economic Recovery (MAMSER), and HIV/AIDS campaigns, all of which were (some still are) educational programs that made banner headlines. Environmental education, the process of inculcating the right values, attitudes, skills, and knowledge for the physical environment, seems to be the solution to the current pandemic crises that may worsened rural poverty, (Oladapo, 2020)

## **Objectives of the Study**

### **The Main Objectives of the Study are;**

1. To investigate if rural dwellers in south west believe the existence of Covid19.
2. To investigate if the rule of social distance is practicable among rural dwellers
3. To appraise their opinion on whether they believe people in rural area can be infected with the virus
4. To look at their opinion over the sincerity of government towards eradication of the pandemic

### **Research Questions.**

- Do you believe on the existence of corona virus in Nigeria?
- Can the rule of social distance work among the rural dwellers?
- Can people in the rural area be infected with Covid19?
- Is the government sincere about the eradication of this pandemic?

- What are the lesson learnt about the pandemic?

### **Method**

Method adopted for the collection of data for the study was Interview method. Interview method according to Dale, 2018 is a popular way of gathering qualitative research data as it is perceived as talking and this is natural. The interview does not require statistical knowledge and the respondents are always willing to respond as it give them confidence.

The data collected were analyzed using frequency count, percentage.

### **The Scope of the Study**

The study covers rural dwellers in south western state of Nigeria and total of two hundred and Ten (210) respondents were randomly chosen to be interviewed by the researchers and research assistants. Standardized questions were set for all the respondents. Thus any answer will be caused by differences among the respondents.

### **Results**

S/N	RESEARCH QUESTIONS		Y	E	S	N	O	TOTAL
1 .	Do you believe in the existence of Covid19?	F	6	3	1	4	7	2 1 0
		%	1	5	6	5	4	1 0 0
2 .	Can coronavirus infect local people	F	2	5	.7	7	4	.3 2 1 0
		%	5	.7		9	4	.3 1 0 0
3 .	Is social distancing possible in the local community setting?	F	3	0	7	0	2	1 0 0
		%	1	9	8	1	2	1 0 0
4 .	Do you believe government is making money out of it?	F	1	7	7	3	3	2 1 0
		%	8	4	.3	1	5	.7 1 0 0

The table reveals the responses of some selected Nigerian's on the issues surrounding coronavirus in Nigeria.

Research question 1 revealed that 74.3% of the respondents believe that coronavirus is real, they were of the opinion that if it's not real there will be no need for social distancing and total lockdown in most of the states of the federation and restricting the freedom and movement of people as well as the close down of business activities. Most of the respondents also pointed out that when the pandemic started they didn't believe it was real until there was a rise in the number of infected cases and deaths globally which led to a lockdown, which then made them realize coronavirus is real, while 25.7% of the respondents are of the opinion that coronavirus is not real in Nigeria because the government are not transparent and has failed to disclose the identity of those they claim are infected which was not so in most developed nations but only disclosed the identity of government officials or influential people that are infected in the society. Some respondents also of the opinion that coronavirus is not real because the government of Nigeria are not trustworthy with any policies and data they give.

Research question 2 revealed that 94.3% of the respondents are of the view that people at the Rural community cannot be infected with coronavirus with the believe that the virus is for the elite who are always travel out and spend most of the time inside the air conditional. They also based their argument on the saying that it cannot survival under serious heat that is in rural areas while 5.7% of the respondents are of the opinion that local peoples can be infected with the virus because they sometimes mingle with people from urban areas.

Research question 3 revealed that 70% of the respondents are of the opinion that social distancing is not possible in the community setting with the believe that it will be very difficult to separate people from themselves and because of the cultural setting and ways of life people have been used to from on set. They also included that it is not possible because in the community people depend so much on one another. Some also believe that people in the community setting embrace themselves and by such they have seen themselves as one big family in the community that to maintain social distancing at this period will not be an easy task in most community in Nigeria. A respondent is narrated that the house he is living in is twelve rooms apartment and of the same family with minimum of 3 people in a room, the question he asked was who will be ejected and to where? while the remaining 30% are of the believe that social distancing is possible in the community setting since it is a measure to reduce the spread of COVID-19 among the members of the community and added that the government needs to create more awareness about it so as to realize it in the community setting. Most of respondents in this category live in fairly spacious environment.

Research question 4 revealed that 84.3% of the respondents believe that governments are hiding in the name of COVID-19 to make huge money. Majority of the respondents are of the opinion that Nigeria government has failed to give accurate account and are not transparent to the masses with the huge donations they have received from individuals, NGOs, and international organizations to fight COVID-19. Palliatives and relief materials as well as distribution of cash to the needy have not been properly channeled to the right people. They were unable to give the statistics or data they have been using to distribute the cash to the needy even with the level of cash distribution government claimed to have distributed is having a form of favoritism and nepotism in nature with the view that northern states who are yet to record large number of confirmed cases of coronavirus are benefiting more than most states that have recorded large number of confirmed cases, while 15.7% of the respondents are of the view that government are not making money out it because there are no established evidences to know if government are truly making money out of it but they believe government are trying their best in the fight against coronavirus.

Research Question 5 which is looking at the lesson coronavirus teaches members of the community.

Some of the respondents stated that COVID -19 has taught them that there is always a need to save for the future even as an individual, nations at large and also regulate and control unnecessary expenses as no one knows what the future will bring.

Some are also of the view that the current pandemic has actually made them to be close to God, while some respondents stated that it has taught them not to totally depend on government for everything but work hard on their own path.

Some are also of the view that coronavirus has taught them that cleanliness is vital as we have to always keep our environment clean at all time and also practice a good personal hygiene, while some disclosed that coronavirus has taught them how to stay with their family members as well as the advantage of spending quality time with their family members reducing their social life.

Some respondents also stated that coronavirus has exposed the failure of government especially in Africa as well as the fact that the poverty level in different communities and the nation at large as increased.

### **Conclusion**

It can be concluded from this study that, like people in urban areas, rural dwellers believe in the existence of Covid19 but they are of the opinion that it is virus for a class of the society. This believes reinforced by media that always talk about the virus as the type that cannot survival under heat and that most victims are travelers. It also revealed that rural dwellers are losing faith in their government and this is very dangerous as they might not be yielding to government directives and can make eradication a difficult task to be accomplished. The finding also revealed the weakness in the part of the government on the health status of the country.

### **It is therefore recommended as follow:**

- Government should as a matter of urgency look at alternative to social distance as the cultural setting does not allow for social distancing in rural areas where more than half of the population reside.
- Government should always be transparent in all issues and be well coordinated. A situation in which a state governor declared that 74 news case were identified and the agency in charge put it at 4 does not allow for citizens to trust their leaders.
- Government should always prepare for time like this. A situation whereby some state government are requesting for pay cut for civil servant who have been locked down does not speak well for the system as loyalty to the system.

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